

THIN-FILM TRANSISTOR

Abstract

A thin-film transistor includes a substrate, a semiconductor layer and a gate positioned on the substrate. The semiconductor layer has a channel region, two lightly doped drains and two source/drain regions. The two lightly doped drains are symmetrically arranged with respect to the gate. Either of the gate edges overlaps with portions of the adjacent lightly doped drain. Neither of the junctions between the lightly doped drains and the source/drain regions overlaps with the gate. Neither of the source/drain regions overlaps with the gate.